App No.: 09/503,758

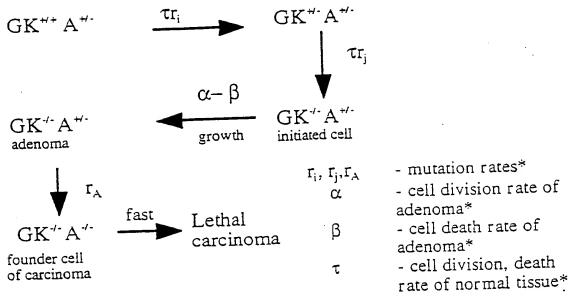
Title: Methods of Identifying Point... inventor: William G. Thilly



Fig. 1

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^{*} all variables may be affected by exposure, xenometabolism, DNA repair

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Title: Methods of Identifying Point
Inventor: William G. Thilly

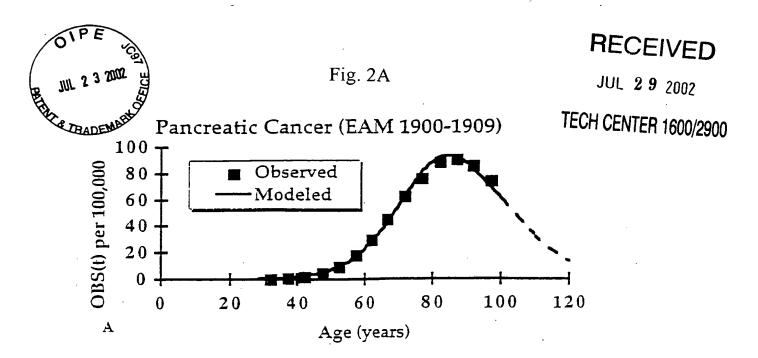
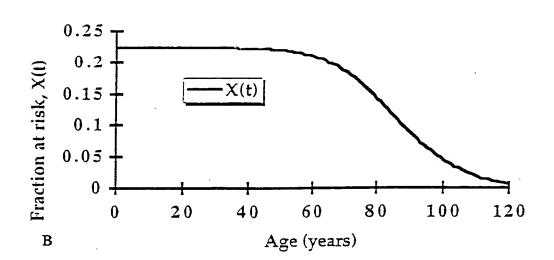


Fig. 2B



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1,000 people per group

Individuals ± 2SD with a particular polymorphism

Monogenic Disease

[n = l]

Monogenic Disease

二

10,000 people per group

of

200

Newborn

Proband

Centenarian

people

400

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Fig. 3B

Fig. 3C of people people of people 48 32 <u>_</u>6 2 6 8 <u>_</u>6 32 48 Newborn Newborn Newborn Polygenic Multigenic Proband Proband Disease Disease Centenarian Centenarian Centenarian [n=5][n = 2]

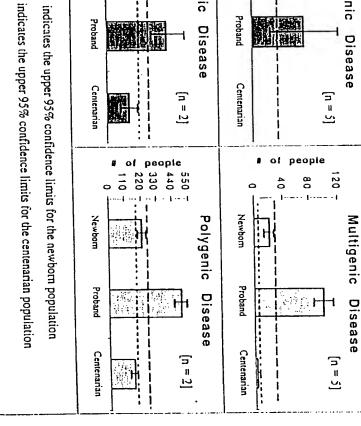


Fig. 3F

Fig. 3E

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Title: Methods of Identifying Point William G. Thilly Inventor:

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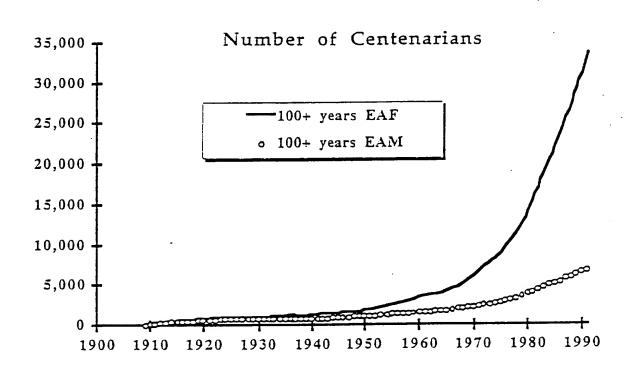


Fig. 4

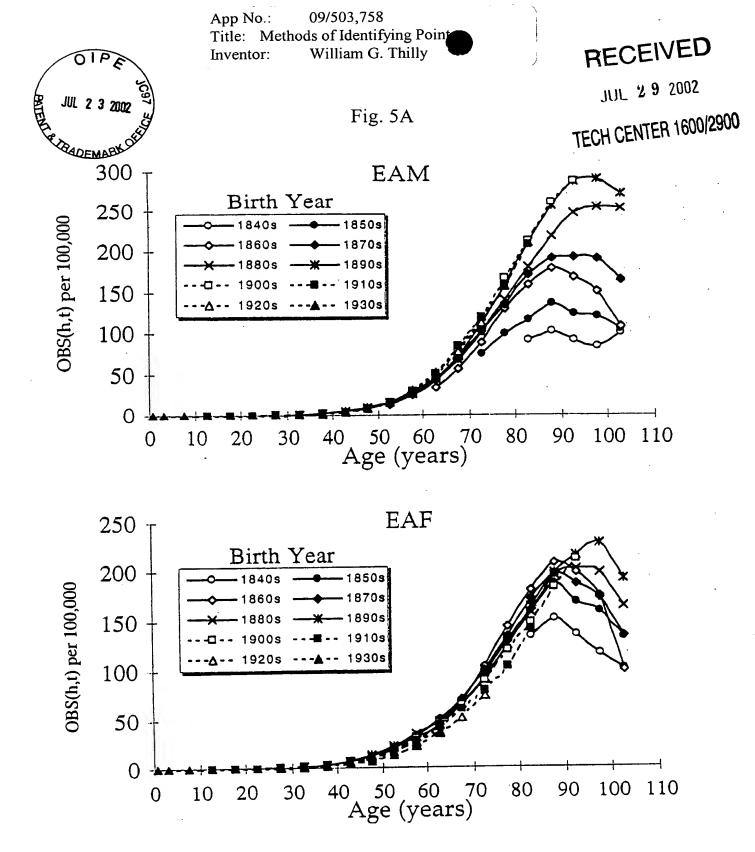


Fig. 5B

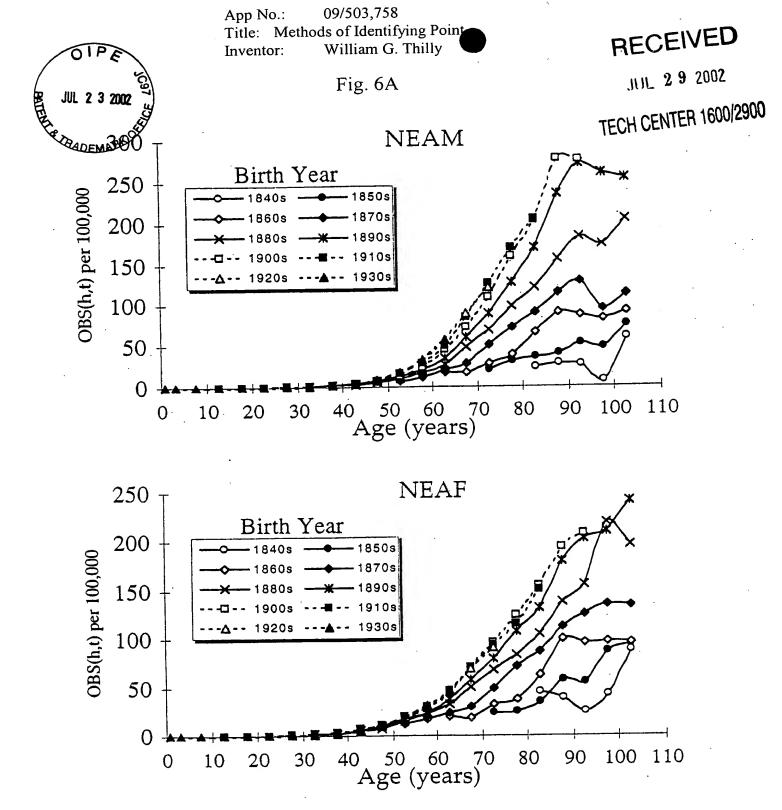


Fig. 6B

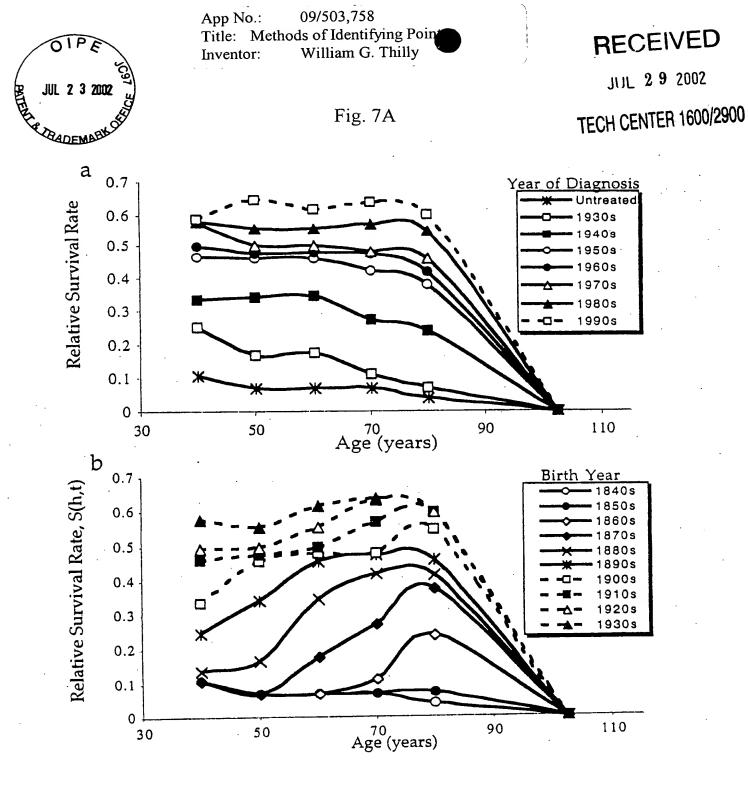


Fig. 7B

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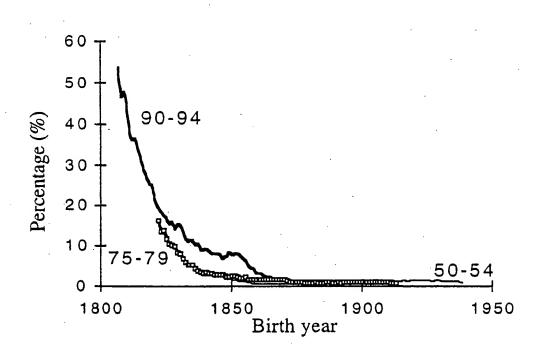
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Inventor: William G. Thilly

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Fig. 8



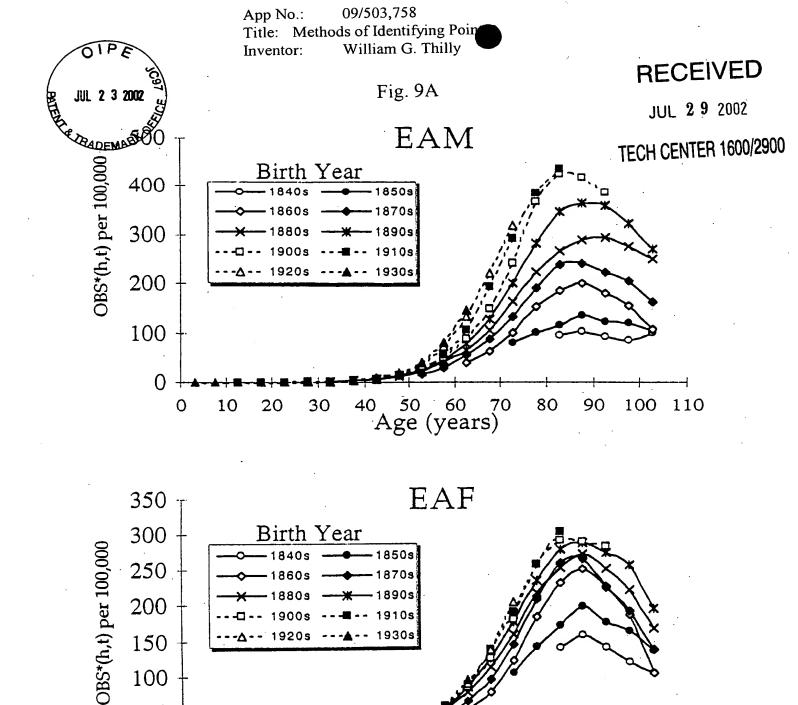


Fig. 9B

) 50 60 70 Age (years)

. 0

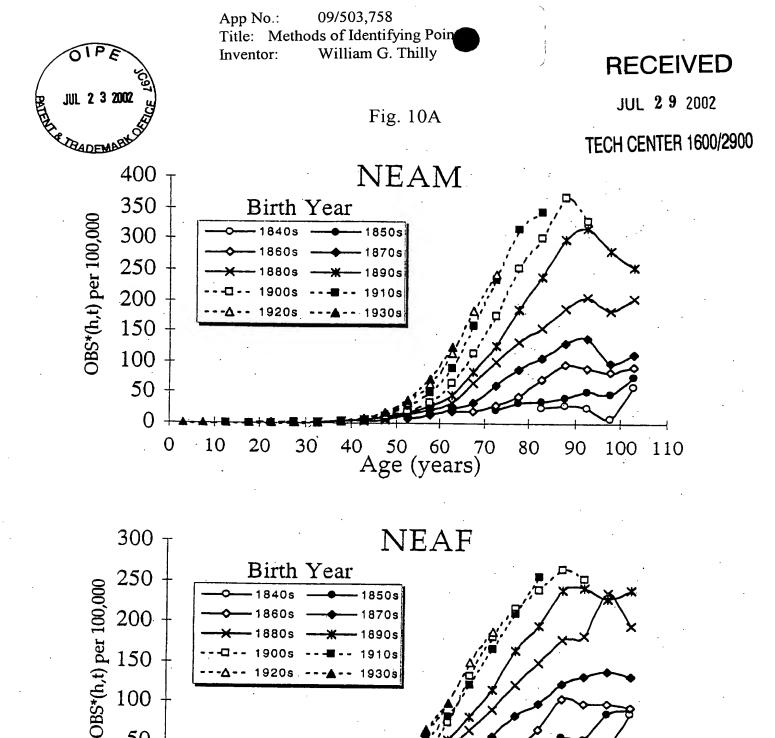


Fig. 10B

Age (years)

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Fig. 11A

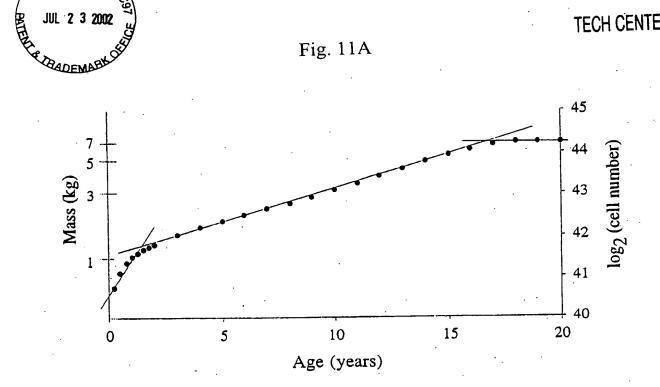
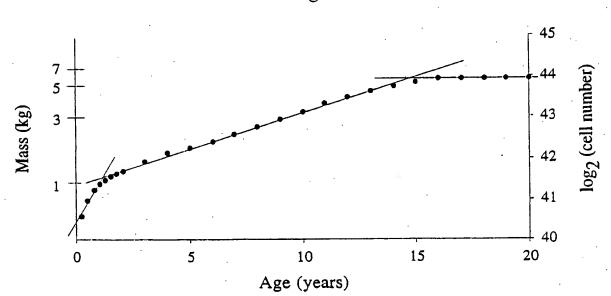


Fig. 11B



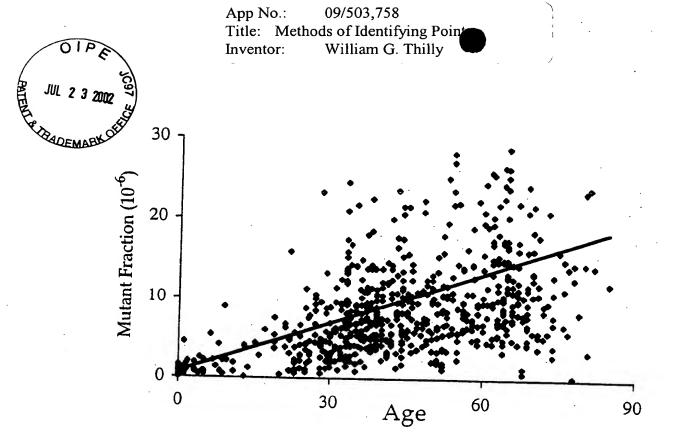


Fig. 12

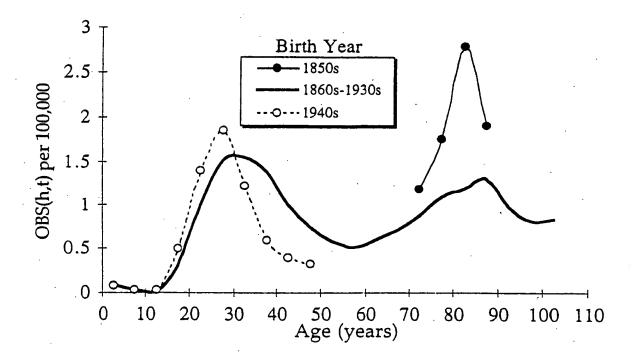


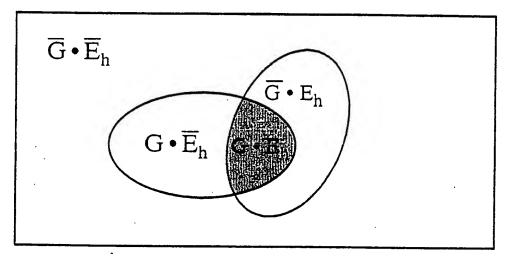
Fig. 13

OIPE BATEMA PRODUMBE JUL 2 3 2002

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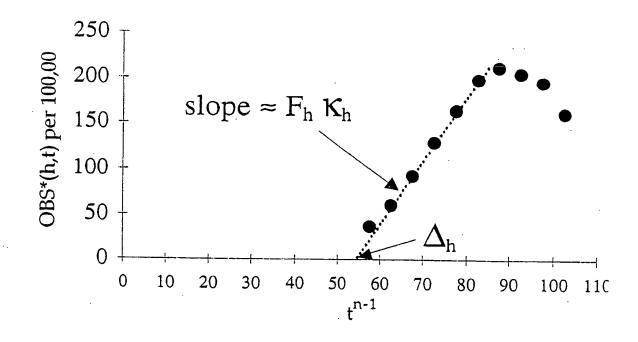
William G. Thilly

Fig. 14



 $G = F(h,t)_{genetic}$ $E_h = F(h,t)_{environmental}$ $\overline{G} = (1 - G) = \text{not in } F(h,t)_{\text{genetic}}$ $\overline{E}_h = (1 - E_h) = \text{not in } F(h,t)_{\text{environmental}}$

Fig. 15



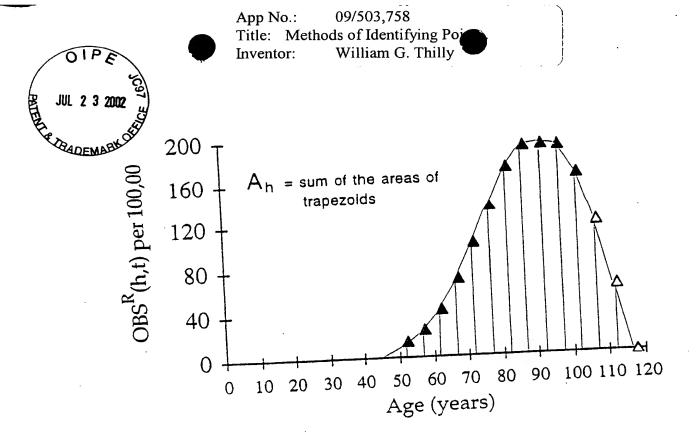


Fig. 16

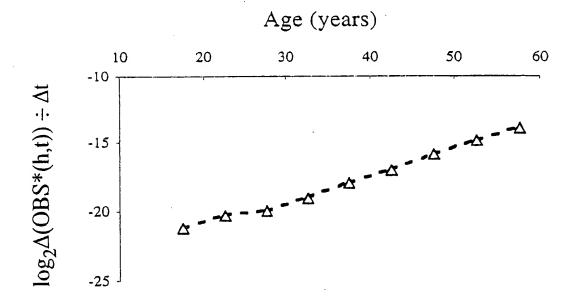


Fig. 17

App No.: 09/503,758
Title: Methods of Identifying Point Inventor: William G. Thilly

Fig. 18

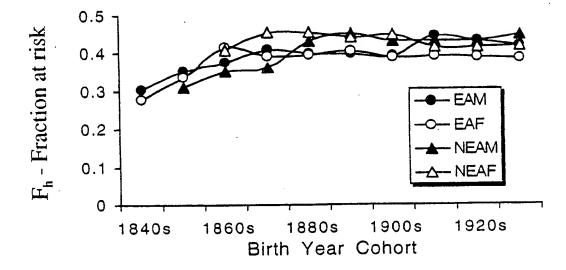
APC ^{+/+} GK2 ^{+/-}	APC ^{+/-} GK2 ^{+/-}	APC ^{-/-} GK2 ^{+/-}	APC GK2 -/-
mutation rate r _i	mutation rate rj	mutation rate r_A growth rate $(\alpha - \beta)$	

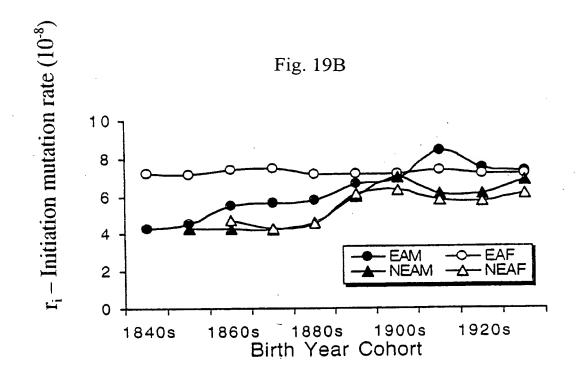


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Title: Methods of Identifying Point.
Inventor: William G. Thilly

Fig. 19A





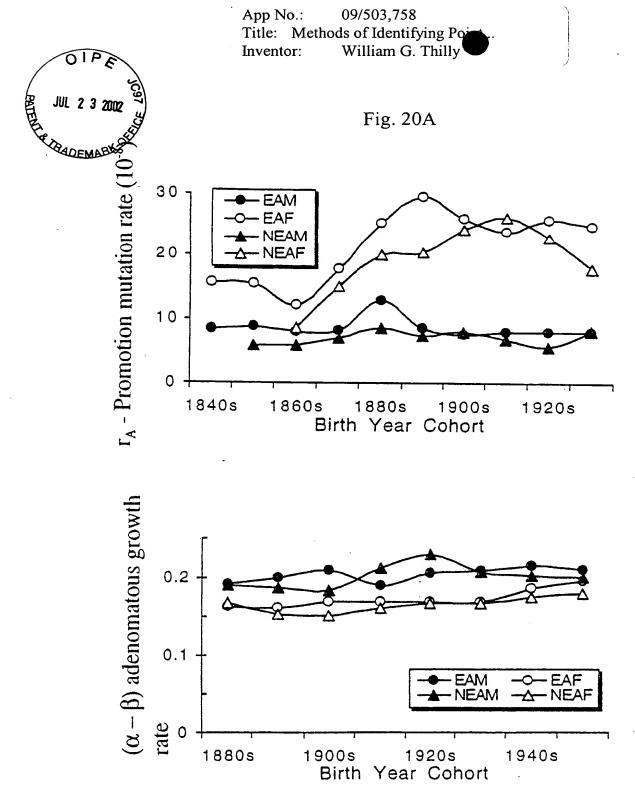


Fig. 20B

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nventor: William G. Thilly

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Age 'a': initiated cell

stochastic survival growth rate $(\alpha_1 - \beta_1)$, mutation rate r_A

Age 't₁': first promotional event

stochastic survival growth rate $(\alpha_2 - \beta_2)$, mutation rate r_B

Age 't2': second promotional event

stochastic survival growth rate $(\alpha_3 - \beta_3)$, mutation rate r_C

Age ' t_{m-1} ': (m-1)th promotional

stochastic survival

- event

growth rate $(\alpha_m - \beta_m)$, mutation rate r_{mth}

Age 't': 'mth' promotional event promoted cell

stochastic survival growth rate $(\alpha_c - \beta_c)$

Cancer

Fig. 21

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App No.: 09/503,758

Title: Methods of Identifying Point Inventor: William G. Thilly

10⁻⁵ std. Fig. 22A Relative Fluorescence MNNG-treated cells -10⁻⁶ std. Fig. 22B

Untreated cells = PCR noise

38

30 Minutes



App No.: 09/503,758

Title: Methods of Identifying Point Inventor: William G. Thilly Inventor:

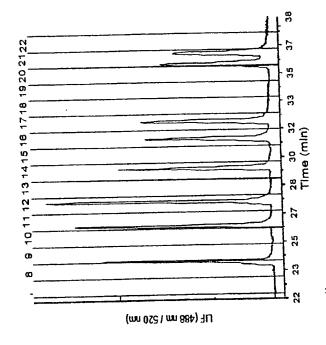


Fig. 23A

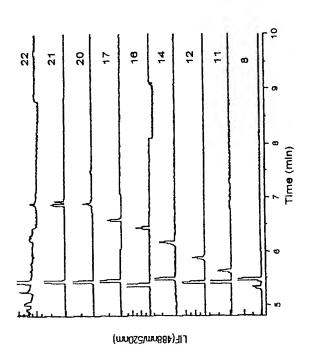


Fig. 23B

App No.: 09/503,758
Title: Methods of Identifying Point...
nventor: William G. Thilly

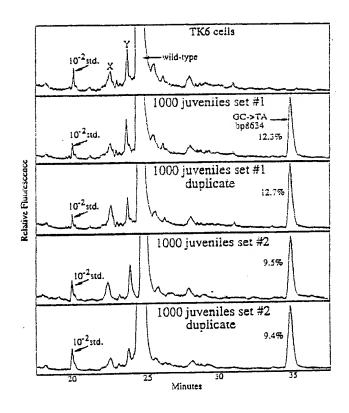
nventor:

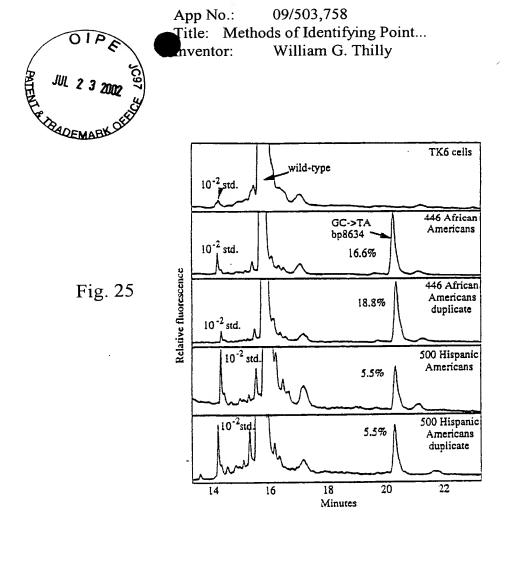


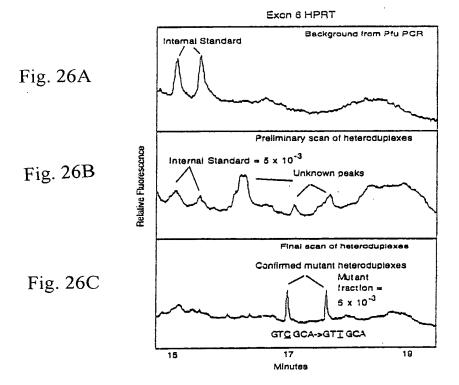
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Fig. 24



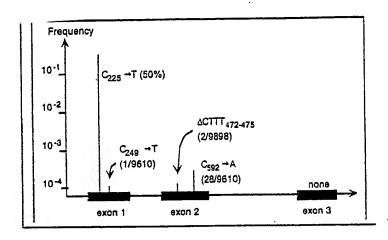




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App No.: 09/202,726
Title: Methods of Identifying Point
Truentor: William G. Thilly

Fig. 27



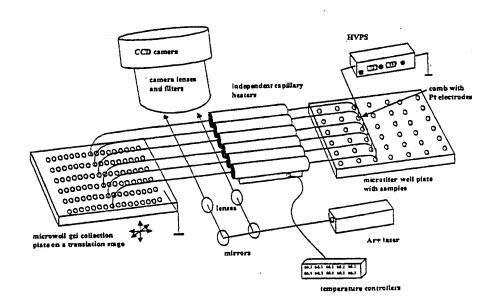


Fig. 28

09/503,758 App No.:

Title: Methods of Identifying Point.

William G. Thilly Inventor:

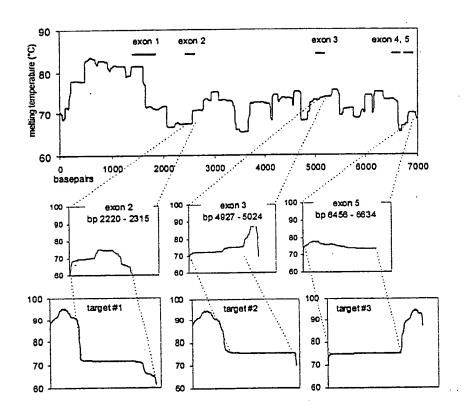




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Fig. 29



 ${\tt TGCTCCC-agccagcuggCC\underline{T}AGagaaaaccugAAGGT}$ T T 5'3' T TCGAGGG TCGGTCGACCGGATCTCTTTTGGACTTCCT

Fig. 30